

D3 the first price, if the minimum price is less than the first price and the first price is less than the maximum price, or

the maximum price, if the first price is greater than the maximum price.

205. The method of claim 204 wherein the first price is a price at which the offer matching system previously executed a trade for the traded item.

206. The method of claim 204 wherein the first price is a weighted average price for a plurality of trades previously executed by the offer matching system.

207. The method of claim 206 wherein the plurality of trades used to calculate the first price exclude trades at unusually low or unusually high prices.

208. The method of claim 204 wherein the first price is dependent upon at least one data item that reflects trading in the traded item that did not occur through the offer matching system.

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#### REMARKS

This is in response to the Office Action (Paper No. 18) mailed on October 10, 2001 for the above-captioned application. Reconsideration of the application, as amended, and allowance of all claims in view of the remarks herein are respectfully requested.

In Paper No. 18 at Paragraph 5, the Examiner listed claims 153-158 both as part of Invention I and as the only Claims in Invention II. For purposes of this response, Applicant has assumed that the inclusion of Claims 153-158 in Invention I in the Paper No. 18 was the result of a clerical error. Please notify applicant immediately if Claims 153-158 are part of Invention I. Examiner is asked to note that claims 153-158 were previously allowed.

In response to Paper No. 18, Applicant has:

- (i) elected what the Examiner described in the Office Action as Invention I (i.e., claims 65-123, 129, 137-140, 163-166 and 168);
- (ii) deleted the non-elected claims 153 through 158 that the Examiner described in the Office Action as Invention II;
- (iii) revived claims 52-55, 124-128, 130-136 and 142-147 that (a) the Examiner identified as included within Invention I in the Office Action (Paper No. 9) mailed October 13, 2000 and (b) the Examiner appears to have rejected in the Office Action (Paper No. 13) mailed February 14, 2001 by addition of identical claims 187-208 (hereinafter referred to by old claim number (new claim number)); and
- (iv) added the following new claims that are part of Invention I and are similar to claims that the Examiner has already examined: 169-186.

After making the amendments to the claims set forth above, the following claims are in this Application: 65-123, 129, 137-140, 163-166 and 168-208. The Examiner has already allowed the following claims: 65-123, 138-140 and 168. The following claims were previously amended as requested by the Examiner to make them allowable: 129 and 137.

Since Applicant has revived claims which the examiner rejected in Paper No. 13, Applicant now responds to those objections and discusses the new claims that Applicant has added.

#### Claim 130 (196)

In Paper No. 13 at Pages 4-5 Paragraph 13, the Examiner has rejected Claim 130 (196) as directed to non-statutory subject matter under 35 U.S.C. 101 because "the data does not impact functionality to either the data as claimed or to the computer."

Applicant respectfully notes that Section 101 does not contain any requirement that an invention "impact functionality" to anything. In addition, Applicant notes that there are issued US Patents that include claims for data streams that are new and useful (see, for example, claim 21 of US Patent 6,301,462, which claims "[a] computer data signal embodied in a digital data stream comprising data including education modules, wherein the computer data signal is generated by a method comprising the steps of ...").

Further, Applicant draws the examiner's attention to the limitations contained in Claim 130 (196) which limit the claim to data streams concerning offers submitted to an offer matching system. This assures that a data stream that satisfies Claim 130 (196) is not merely non-functional descriptive material stored on a computer-readable medium, as suggested by the Examiner.

In light of the foregoing, Applicant respectfully requests that the Examiner reconsider the rejection of Claim 130 (196).

*Claims 52-55 (187-190), 124-128 (191-195), 131-134 (197-200), 135 (201), 136 (202) and 142-147 (203-208)*

In Paper No. 13 at Paragraph 14, the Examiner rejected claims 52-55 (187-190), 124-128 (191-195), 131-134 (197-200), 135 (201), 136 (202) and 142-147 (203-208) under 35 U.S.C. 103(a) as being unpatentable over Sibley, Jr. (4,677,522 hereinafter "Sibley").

*Claims 52 (187) and 53 (188)*

At page 5 line 17 of Paper No. 13, the Examiner suggests that the first disclosee of Claims 52 (187) and 53 (188) corresponds to Sibley's investors.

At page 5 line 19 of Paper No. 13, the Examiner suggests that the participants of Claims 52 (187) and 53 (188) correspond to Sibley's local exchanges.

At pages 5 line 20 and 6 line 2 of Paper No. 13, the Examiner suggests that the offer matching system of claims 52 (187) and 53 (188) corresponds to Sibley's central exchange host.

Claim 52 (187) step (d) requires "the offer matching system's executing the first offer at least in part against the second offer".

At page 6 lines 14-15 of Paper No. 13, the Examiner asserts (without citing any relevant language in Sibley) that Sibley's "central exchange host completes the transaction based on matches found for that particular trade". However, Sibley teaches away from having the central exchange host complete transactions based on matches found between buy and sell orders. Sibley at column 5, lines 3-26 teaches that offers should be executed at a local exchange or a user terminal connected to a local exchange, rather than at Sibley's central exchange. Sibley teaches

communicating information about a first offer from a member to a first local exchange (Sibley at column 5, lines 3-10), from the first local exchange to a central host exchange (Sibley at column 5, lines 9-12), from the central host exchange to a second local exchange (Sibley at column 5, lines 12-14), and from the second local exchange to the user terminals of the members of the second local exchange (Sibley at column 5, lines 15-17). Sibley also teaches that it is the individual members of the second local exchange (rather than the central host exchange) that will decide whether to trade with the member associated with the first local exchange that first communicated information about the first offer (Sibley at column 5, lines 17-21). Thus, Sibley teaches that the actions performed by the central host exchange should not give rise to binding obligations to clear and settle a trade (since Sibley teaches that, even after the central host exchange has relayed information, the members of the second local exchange should remain free to trade or to not trade). In contrast, clause (d) of Claim 52 (187) requires that the offer matching system execute the first offer against a second offer. The application at page 1 lines 20-21 expressly states that “execute” means “give rise to a binding obligation to clear and settle a trade”.

Claim 52 (187) step (d) requires a “set of rules that govern the operation of the offer matching system”.

At page 6 lines 15-18 of Paper No. 13, the Examiner asserts that it would have been obvious to add to Sibley’s central host exchange a set of rules that govern the operation of an offer matching system. However, Sibley teaches away from the Examiner’s suggestion in two ways. First, as discussed above, Sibley teaches away from having the central host exchange operate as an offer matching system that executes one offer against another. Second, Sibley teaches that each of the local exchanges (where trades are actually executed) should have trading rules that permit any trader terminal on one local exchange to trade with any trader terminal on another local exchange (See Sibley at column 5, lines 52-57), thereby eliminating any need for the central host exchange to have trading rules of its own that govern the execution of offers.

Claim 52 (187) step (e) requires “communicating from the first disclosee to the first participant a first request for information concerning the first offer”. At Page 6 lines 5-7 of Paper No. 13, the Examiner suggests that Sibley discloses such a request at column 5 lines 34-51.

However, Sibley at column 5 lines 34-51 discloses sending trading data (rather than requests) to a first exchange (and thence to the central exchange host and thence to a second local exchange). Despite diligent review of the cited lines, Applicant has been unable to find any disclosure of sending any type of request at Sibley column 5 lines 34-51. While line 35 does mention a “desire to receive” and line 36 does mention “communicate,” Applicant has been unable to find any suggestion of communicating a request for information rather than passively receiving information sent without request. Applicant respectfully requests that the Examiner more specifically point out where Sibley discloses such a first request.

Claim 52 (187) step (f) requires “in response to the first request, communicating from the first participant to the offer matching system a second request for information concerning the first offer”. At Page 5 lines 7-10 of Paper No. 13, the Examiner suggests that Sibley at column 5 lines 14-51 discloses such a second request in response to a first request. After diligent study of the cited lines, Applicant has been unable to find any disclosure of such a second request in Sibley at column 5 lines 14-51. The one mention of a request that Applicant was able to find in the cited lines is at column 5 lines 15-17, which disclose a local exchange’s relaying a request to each of its members, rather than a member’s relaying a request to a central host matching system. Applicant respectfully requests that the Examiner more specifically point out where Sibley discloses a second request of the type required by clause (f) of Claim 52 (187).

Claim 52 (187) step (g) requires “in response to the second request, communicating from the offer matching system to the first disclosee a first response.” At Page 7 lines 1-3 of Paper No. 13, the Examiner suggests that this requirement is disclosed in Sibley at column 7 lines 35 to column 10 lines 1-66. After diligent study, Applicant has been unable to find in the cited lines any disclosure of communicating a response from a central host exchange to a local exchange. Applicant respectfully requests that the Examiner more specifically point out where Sibley discloses communicating such a response in response to such a request. Applicant also notes that the cited lines teach away from having the central host exchange provide information in response to requests for information. For example, (i) Sibley at column 7 line 61 to column 8 line 7 teaches transmitting information “in bulk” from the central host exchange to all user terminals and then displaying on each user terminal the information that the applicable user requests from

his terminal and (ii) Sibley at column 10 lines 17-31 teaches having each user terminal receive an “unmanageable” total volume of information that is transformed by the intelligent terminal into a concise subset by filtering out the information that the user has selected through his interactions with the user terminal. The broadcast / filter approach taught by Sibley teaches away from the request / response approach required by clause (g) of Claim 52 (187).

Claim 52 (187) step (g) requires that the response comprise “a first digital signature from the offer matching system”. The Application at Page 29 line 25 - Page 30 line 8 explains how including a digital signature in such a response certifies that other information contained in such response was provided by the offer matching system and has not been changed by someone else. Thus, the purpose of such a digital signature is to protect the first disclosee rather than to protect the offer matching system. At page 7 lines 3-8 of Paper No. 13, the Examiner suggests that because Sibley teaches at column 8 lines 38-44 and column 9 lines 45-53 that the central exchange host can restrict security by a variety of means, then it would have been obvious to have included requesting a first digital signature in order to achieve the advantage of having the central exchange host restrict security. However, clause (g) of Claim 52 (187) achieves the advantage of having the first disclosee restrict security (by enabling the first disclosee to detect responses that are not from the offer matching system or have been tampered with) and provides no security protection whatsoever for the offer matching system (i.e., the use of a digital signature on responses sent by the offer matching system, rather than encryption, provides no assurances whatsoever to the offer matching system that the responses will be read only by authorized recipients). In addition, Sibley at column 8 lines 47-52 teaches away from the use of digital signatures by teaching that “all of the data being received or transmitted will be encoded or scrambled”, which would obviate the need for using a digital signature to enable the first disclosee to detect responses that are not from the offer matching system or have been tampered with.

In light of the foregoing discussion, Applicant respectfully requests that Claim 52 (187), and Claims 53-55 (188-190) and 163-166 dependent therefrom, be allowed.

Claim 53 (188) requires that step (g) of Claim 52 (187) be performed by “communicating from the offer matching system to the first participant the first response and communicating from

the first participant to the first disclosee a second response comprising the first data item and the first digital signature.” The Examiner has not stated where that requirement is disclosed in Sibley. Consequently, Applicant respectfully requests that Claim 53 (188) be allowed.

*Claim 54 (189)*

Claim 54 (189) requires that the first request comprise a requirement that a first event occur. As discussed above, Sibley does not disclose, and in fact teaches away from, a first request of the type required by Claim 52 (187) from which Claim 54 (189) depends.

Claim 54 (189) in its final clause requires that step (g) of Claim 52 (187) (i.e., the response from the offer matching system to the first disclosee) not be performed until a particular event has occurred. As discussed above, Sibley does not disclose, and in fact teaches away from, a response of the type required by Claim 52 (187).

At page 7 lines 9-14 of Paper No. 13, in the discussion of Claim 54 (189), the Examiner has suggested (without citing any prior art) that it would have been obvious to add to Sibley’s disclosure responding to the applicable request only after a change in the applicable offer has taken place because such a modification would save time by only responding to the request when changes have occurred to the offer. However, Sibley teaches away from limiting communications to the minimum required to provide an investor with the information needed by that investor. As discussed above in the context of Claim 52 (187) step (g), Sibley teaches broadcasting lots of information to all investors and then having each user terminal filter out and display the information that is of interest. The Examiner has provided no prior art to support the Examiner’s contention that making the timing of the response contingent upon the occurrence of an event specified in the request is obvious. Applicant’s attorney disagrees with this view, and motivated by the case of *In Re Ahlert and Kruger*, 165 USPQ 418 (CCPA 1970) applicant’s attorney hereby challenges this view and asks whether the Examiner can show support for this view.

In light of the foregoing, Applicant respectfully requests that Claim 54 (189) be allowed.

*Claim 55 (190)*

Claim 55 (190) requires “the method of Claim 52 (187) wherein a predetermined relationship exists between the first data item and the second offer...” At page 7 lines 19-20 of Paper No. 13, in the discussion of Claim 55 (190), the Examiner has suggested (without citing any relevant prior art) that it would have been obvious to have added to Sibley’s disclosure “selecting a predetermined relationship between the first data item and the second offer to obtain the above mentioned advantages.” Applicant’s attorney disagrees with this view, and motivated by the case of *In Re Ahlert and Kruger*, 165 USPQ 418 (CCPA 1970) applicant’s attorney hereby challenges this view and asks whether the Examiner can show support for this view.

In Paper No. 13 at page 7 line 16 the Examiner mentions “on changes and modifications and changes to the offer” and at page 7 lines 17 the Examiner mentions “second offer is to be matched with the first offer to find out if a offer can be executed”. Applicant has been unable to find either of those concepts in Claim 52 (187), Claim 55 (190) or Sibley. Applicant respectfully requests that the Examiner explain the relevance of those phrases to Claim 55 (190).

In light of the foregoing, Applicant respectfully requests that Claim 55 (190) be allowed.

#### *Claim 124 (191)*

Claim 124 (191) step (e) requires “the offer matching system’s executing the first offer at least in part against the second offer in accordance with a set of rules that govern the operation of the offer matching system”. As discussed above in the context of Claim 52 (187) step (d), Sibley does not disclose, but rather teaches away from, (i) the central exchange host’s executing offers (rather than relaying offers to local exchanges for execution there) and (ii) establishing a set of trading rules that govern offer execution by the central exchange host.

Claim 124 (191) step (f) requires “publishing a first data packet that comprises the first identifier and a first data item, the first data item concerning the first offer”. Nowhere in Paper No. 13 does the Examiner assert that the required step (f) of Claim 124 (191) is either disclosed by Sibley or would have been obvious to a person of ordinary skill in the art at the time of Applicant’s invention. In fact, Sibley teaches away from publishing a data packet comprising the identifier for a first offer together with a first data item about the first offer. The Application does not define “publish” because it is used with its normal meaning. According to Merriam-



Webster's Collegiate Dictionary on line (available at <http://www.m-w.com/> as of 2001.10.28), the word "publish", when used in the transitive sense as it is in Claim 124 (191), means: 1a: to make generally known; 1b: to make public announcement of; 2a: to disseminate to the public; 2b: to produce or release for distribution; specifically: PRINT; 2c: to issue the work of (an author). Sibley at Column 8 lines 47-52, in the context of a discussion of Sibley's Figure 4 (which concerns the internal structure of Sibley's user terminals), teaches that "all of the data being received or transmitted will be encoded or scrambled so that it has to be either decrypted (descrambled) or encrypted depending upon whether it is being sent or received." Thus, while Sibley's use of a satellite to transmit data from a central exchange host to user terminals might at first blush suggest a form of publication, Sibley's teaching that all data be encrypted would deny members of the public who might receive such a transmission the ability to learn the contents of such transmission and thus teaches away from the idea of the central host exchange's publishing any information.

In Paper No. 13 at page 8 lines 9-10 the Examiner asserts that Sibley's "central exchange host completes the transactions based on the matches found for that particular trade" and at page 8 lines 11-10 the Examiner asserts that "it would have been obvious for the matching system to have a set of rules that govern the operation of the offer matching system". However, as discussed above in the context of Claim 52 (187) step (d), Sibley does not disclose, but rather teaches away from, (i) the central exchange host's executing offers (rather than relaying offers to local exchanges for execution there) and (ii) establishing a set of trading rules that govern offer execution by the central exchange host.

In light of the foregoing discussion, Applicant respectfully requests that Claim 124 (191), and Claims 125-128 (192-195) and 163-166 dependent therefrom, be allowed.

#### *Claim 125 (192)*

Claim 125 (192) requires that "under the set of rules [of the offer matching system], the offer matching system is permitted to disclose publicly that the first data item concerns an offer associated with the first identifier". Nowhere in Paper No. 13 does the Examiner assert that this requirement of Claim 125 (192) is either disclosed by Sibley or would have been obvious to a

person of ordinary skill in the art at the time of Applicant's invention. As discussed above in the context of Claim 52 (187) step (d), Sibley teaches away from establishing a set of trading rules that govern offer execution by the central exchange host. As discussed above in the context of Claim 124 (191) step (f), Sibley teaches away from publicly disclosing any data. In light of the foregoing discussion, Applicant respectfully requests that Claim 125 (192) be allowed.

*Claim 126 (193)*

Claim 126 (193) requires that "a predetermined relationship exists between the first data item and a second offer against which the first offer was executed at least in part". In Paper No. 13 at page 9 lines 7, the Examiner's discussion of Claim 126 (193) begins as follows: "With respect to claim 126 (193), since the first data item is responsive to the information requested by the disclosee on changes and modifications and changes to the offer and since the second offer is to be matched with the first offer to find out if a offer can be executed" [emphasis added]. However, after diligent examination of Claims 124 (191) (the only claim from which Claim 126 (193) is dependent) and 126 (193), Applicant has been unable to discover in either of such Claims any mention of (i) a response to a request, (ii) a request, (iii) a disclosee, (iv) changes, (v) modifications, or (vi) matching offers. Consequently, Applicant respectfully requests that the Examiner explain how the quoted language relates to Claim 126 (193). In Paper No. 13 at Page 9 lines 11-12, the Examiner's discussion of claim 126 (193) ends as follows: "to have included selecting a predetermined relationship between the first data item and the second offer to obtain the above mentioned advantages" [emphasis added]. However, Applicant has been unable to figure out what language in Paper No. 13 is the antecedent basis for "above mentioned advantages". Consequently, Applicant respectfully requests that the Examiner explain how the quoted language relates to Claim 126 (193). Applicant respectfully disagrees with the Examiner's assertion that the requirements of Claim 126 (193) would have been obvious to a person of ordinary skill in the art at the time of Applicant's invention and respectfully requests that the Examiner explain why the Examiner believes that it would have been. In light of the foregoing discussion, Applicant respectfully requests that Claim 126 (193) be allowed.

*Claim 127 (194)*

Claim 127 (194) requires the following additional steps: “a first information publishing system’s receiving the first data packet and the first information publishing system’s publishing a second data packet that comprises the first identifier”. Nowhere in Paper No. 13 does the Examiner assert that the required additional steps of Claim 127 (194) are either disclosed by Sibley or would have been obvious to a person of ordinary skill in the art at the time of Applicant’s invention. Furthermore, Applicant has been unable to locate in Sibley any disclosure of any information publishing system. As discussed above in the context of Claim 124 (191) step (f), Sibley teaches away from publishing any information. In light of the foregoing discussion, Applicant respectfully requests that Claim 127 (194), and Claim 128 (195) dependent therefrom, be allowed.

*Claim 128 (195)*

Claim 128 (195) requires that “the second data packet further comprises a second data item”. Nowhere in Paper No. 13 does the Examiner assert that the requirements of Claim 128 (195) are either disclosed by Sibley or would have been obvious to a person of ordinary skill in the art at the time of Applicant’s invention. In light of the foregoing discussion, Applicant respectfully requests that Claim 128 (195) be allowed.

*Claim 131 (197)*

Claim 131 (197) step (e) requires “the offer matching system’s executing the first offer at least in part against the second offer in accordance with a set of rules that govern the operation of the offer matching system”. As discussed above in the context of Claim 52 (187) step (d), Sibley does not disclose, but rather teaches away from, (i) the central exchange host’s executing offers (rather than relaying offers to local exchanges for execution there) and (ii) establishing a set of trading rules that govern offer execution by the central exchange host.

Claim 131 (197) step (f) requires “publishing a first data packet that comprises the first identifier and a first data item, the first data item concerning an execution of the first offer against the second offer”. As discussed above in the context of Claim 124 (191) step (f), Sibley

teaches away from publishing any information. In Paper No. 13 at page 9 lines 1-3, the Examiner takes official notice that it is “old and well known to publish the execution of certain items, for example when a home is sold the price and the location is published and it becomes public information”. Applicant respectfully draws the Examiner’s attention to the fact that Claim 131 (197) step (f) requires that the first data packet comprise the “first identifier” (i.e., the identifier of the first offer). While Applicant admits that Applicant has seen published notices of home sales that disclose the location of the home, the sale price, the seller and the purchaser, Applicant does not recall ever having seen a published notice of a home sale that included an identifier (such identifier not associated with any other offer) for either the offer to sell or the offer to buy that gave rise to the reported sale. Applicant disagrees with the Examiner’s assertion that Claim 131 (197) step (f) would have been obvious to a person of ordinary skill in the art at the time of Applicant’s invention and respectfully requests that the Examiner cite prior art to support that assertion.

In light of the foregoing discussion, Applicant respectfully requests that Claim 131 (197), and Claims 132-136 (198-202) and 163-166 dependent therefrom, be allowed.

*Claim 132 (198)*

Claim 132 (198) requires that “under the set of rules [of the offer matching system], the offer matching system is permitted to disclose publicly that the first data item concerns an execution of the first offer against a different offer”. Nowhere in Paper No. 13 does the Examiner assert that this requirement of Claim 132 (198) is either disclosed by Sibley or would have been obvious to a person of ordinary skill in the art at the time of Applicant’s invention. As discussed above in the context of Claim 52 (187) step (d), Sibley teaches away from establishing a set of trading rules that govern offer execution by the central exchange host. As discussed above in the context of Claim 124 (191) step (f), Sibley teaches away from publicly disclosing any data. In light of the foregoing discussion, Applicant respectfully requests that Claim 132 (198) be allowed.

*Claim 133 (199)*

Claim 133 (199) requires that the first data packet published in Claim 131 (197) step (f) comprise “a second identifier associated with the second offer”. In Paper No. 13 at page 9 lines 13-20, the Examiner asserts that associating a second identifier with the second offer would have been obvious. However, so far as Applicant can tell, the Examiner does not assert anywhere in Paper No. 13 that the requirement of publishing the second identifier is either disclosed by Sibley or would have been obvious to a person of ordinary skill in the art at the time of Applicant’s invention. As discussed above in the context of Claim 131 (197) step (f), the Examiner has cited no prior art that discloses publishing an identifier for the buy offer, the sell offer, or both offers, that gave rise to an executed trade. In light of the foregoing discussion, Applicant respectfully requests that Claim 133 (199) be allowed.

*Claim 134 (200)*

Claim 134 (200) depends upon Claim 131 (197) which, for the reasons discussed above, Applicant believes should be allowed.

*Claims 135-136 (201-202)*

Nowhere in Paper No. 13 does the Examiner expressly state reasons for rejecting Claims 135-136 (201-202). Thus, Applicant respectfully requests that Claims 135-136 (201-202) be allowed.

*Claim 142 (203)*

At page 5 line 19 of Paper No. 13, in the context of discussing Claims 52 (187) and 53 (188), the Examiner suggests that the participants of the Application correspond to Sibley’s local exchanges. Applicant has been unable to discover any suggestion elsewhere in Paper No. 13 that the participants of the Application correspond to any other item in Sibley.

At page 5 line 20 and page 6 line 2 of Paper No. 13, the Examiner suggests that the offer matching system of the Application corresponds to Sibley’s central exchange host. Applicant has been unable to discover any suggestion elsewhere in Paper No. 13 that the offer matching system of the Application corresponds to any other item in Sibley.

Sibley discloses that Sibley's user terminals include display monitors. See, for example, Sibley at: Figure 3; column 6, lines 44-50; Figure 4; and column 8 lines 63-65. Applicant has been unable to find any other sort of monitor in Sibley.

Claim 142 (203) step (a) requires "storing in the offer matching system a first association among a first participant and a first monitor". Applicant has been unable to find in Sibley any suggestion of storing in the central exchange host any association among a first local exchange and a first user terminal monitor. Applicant respectfully requests that the Examiner specifically identify where Sibley teaches storing such an association in the central exchange host.

Claim 142 (203) step (c) requires determining (as part of operating an offer matching system) that a first description of a first offer is from the first participant. Applicant has been unable to find in Sibley any disclosure of having the central exchange host determine which local exchange is the source of a particular offer.

Claim 142 (203) step (e) requires "receiving a message that approves the first offer." Applicant has been unable to find in Sibley any disclosure of (i) an approval of any offer or (ii) receiving any such message.

Claim 142 (203) step (f) requires "determining that the message is from the first monitor". Applicant has been unable to find in Sibley any disclosure of (i) any message that approves any offer, (ii) any messages from a user terminal's display monitor or (iii) any determination that a message is from a user terminal's display monitor that is associated with a first offer.

Claim 142 (203) step (g) requires, in the operation of an offer matching system, "before step (f), refusing to execute the first offer against any other offer." As discussed above, Applicant has been unable to find in Sibley any disclosure that corresponds to step (f). Applicant has been unable to discover in Sibley any disclosure of the central exchange system's refusing to execute any offer in any circumstance.

Claim 142 (203) step (h) requires, in the operation of an offer matching system, "after step (f), executing the first offer at least in part against the second offer". As discussed above, Applicant has been unable to find in Sibley any disclosure that corresponds to step (f). As

discussed above in the context of Claim 52 (187) step (d), Sibley teaches away from having the central exchange host execute any offers.

In Paper No. 13 at Page 10 lines 8-11, in the context of discussing Claim 142 (203), the Examiner asserts (without providing any citation) that "... Sibley teaches that monitor can have access to the execution and process of the offers by identifying themselves to the offer matching system..." Applicant respectfully requests that the Examiner specifically point out where Sibley discloses (i) that a user terminal's display monitor can have access to the execution and process of offers or (ii) that a user terminal's display monitor should identify itself to the central exchange host. Applicant respectfully objects to the Examiner's assertion (without citing any relevant prior art) that it would have been obvious to a person of ordinary skill in the art at the time of Applicant's invention to have included in a method for operating an offer execution system the steps of determining that an approval is from a first monitor [as such term is used in the Application] and not executing a first offer against any other offer until the offer matching system determines that the approval is from the first monitor for security reasons. Applicant's attorney hereby challenges this view and asks whether the Examiner can show support for this view.

In light of the foregoing, Applicant respectfully requests that Claim 142 (203), and Claims 163-166 dependent therefrom, be allowed.

*Claim 143 (204)*

For background concerning Claim 143 (204), the Examiner's attention is directed to the Application, including without limitation page 34 lines 16-26. To make the following discussion of Claim 143 (204) clearer, consider the following 3 examples:

Example A: an offer to sell Acme common stock for \$0.90 per share or better, an offer to buy Acme common stock for \$1.10 per share or better, all prior trades of Acme common stock have been at a price of \$0.50 per share.

Example B: an offer to sell Acme common stock for \$0.90 per share or better, an offer to buy Acme common stock for \$1.10 per share or better, all prior trades of Acme common stock have been at a price of \$1.00 per share.

Example C: an offer to sell Acme common stock for \$0.90 per share or better, an offer to buy Acme common stock for \$1.10 per share or better, all prior trades of Acme common stock have been at a price of \$1.50 per share.

For each of the three examples, the question presented is: if the buy and sell offer are executed against each other, what should be the execution price (i.e., the price at which the seller sells and the buyer buys)?

Turning now to the specific requirements of Claim 143 (204):

Claim 143 (204) concerns a method for executing offers in an offer matching system. As discussed above in the context of Claim 52 (187) step (d), Sibley teaches away from having the central exchange host execute offers against each other.

Claim 143 (204) step (c) requires, in a method for executing offers in an offer matching system, “detecting that the buy offer may be executed in whole or in part against the sell offer”. Applicant has been unable to find in Sibley any disclosure of having a central exchange host detect that a buy offer may be executed in whole or in part against a sell offer. As discussed above in the context of Claim 52 (187) step (d), Sibley teaches away from detecting such circumstance at the central exchange host by teaching that members of a second local exchange will decide when to trade with offers submitted by members of a first local exchange.

Claim 143 (204) step (d) requires, in a method for executing offers in an offer matching system, “determining a minimum price that is the lowest price at which the sell offer may be executed against the buy offer”. For each of Examples A-C, this minimum price would be \$0.90 (the limit price in the sell offer). In Paper No. 13 at Page 10 lines 15-17, the Examiner states that “Sibley further teaches determining a minimum price that is the lowest price at which the sell offer may be executed” and cites Sibley’s Figure 9. However, Sibley actually teaches away from



the requirements of Claim 143 (204) that an offer matching system determine a lowest price. Sibley teaches that user terminals (rather than Sibley's central exchange host) should determine what will be shown in the display of Sibley's Figure 9. Sibley's Figures 6-9 and Sibley at column 9 line 58-column 11 line 40 describe generally how a trader interacts with a user terminal to generate the display of Sibley's Figure 9. In particular, Sibley at column 10 lines 17-21 teaches that the trader selects the local exchanges for which data will be shown in the display of Figure 9. Sibley at column 10 lines 21-27 teaches that as information from multiple local exchanges about multiple traded commodities arrives at the user terminal, the commodities and exchanges that the trader has selected are filtered out and displayed, the others ignored, thereby enabling the trader to concentrate on the information that is important. Sibley at column 10 lines 27-29 drives home the point that it is the intelligent user terminal that transforms the unmanageable total volume of data sent by the central exchange host into a concise subset. Thus, Sibley teaches having a central exchange host relay all offers (including the lowest priced offer to sell) to all user terminals and having each user terminal determine and display the lowest priced offer to sell for each of multiple local exchanges selected by a trader. This teaches away from the requirement of operating an offer matching system so that the offer matching system determines a lowest price.

Claim 143 (204) step (e) requires, in a method for executing offers in an offer matching system, "determining a maximum price that is the highest price at which the buy offer may be executed against the sell offer". For each of Examples A-C, this maximum price would be \$1.10 (the limit price in the buy offer). In Paper No. 13 at Page 10 lines 15-18, the Examiner states (without citation) that "... Sibley further teaches ... determining a maximum price that is the highest at which the buy offer may be executed against the sell offer ...". For reasons parallel to those discussed above in the context of Claim 143 (204) step (d), Sibley teaches away from the requirements of Claim 143 (204) that an offer matching system determine a maximum price. Sibley teaches that user terminals (rather than Sibley's central exchange host) should determine what will be shown in the display of Sibley's Figure 9.

In Paper No. 13 at page 10 line 19 to page 11 line 3, the Examiner states (without citation) that "... Sibley further teaches ... (i.e., the buyer specifies the maximum quantity and

price that he is willing to pay for a particular commodity, the maximum price is greater than the minimum price and In which the buy offer may be executed is greater than the minimum price that is greater than the minimum at which the offer can be executed then the offer will be matched and executed.” [emphasis added] As discussed above in the context of Claim 52 (187) step (d), Sibley teaches away from having the central exchange host execute offers.

Claim 143 (204) step (f) requires, in a method for executing offers in an offer matching system, “selecting a first price that is indicative of recent trading activity for the traded item”. In Paper No. 13 at page 11 lines 5-9, the examiner states (without citation) that it would have been obvious for the trader that submits the buy offer to have selected the limit price of the buy offer (i.e., \$1.10 in Examples A-C) to be indicative of recent trading activity. However, Claim 143 (204) is addressed to a method for executing offers in an offer matching system, and not to a method for deciding what offers a potential seller might enter into an offer matching system. Consequently, Claim 143 (204) concerns steps performed in an offer matching system, rather than steps performed by a trader. Thus, even if (for purposes of discussion) it should be obvious in light of Sibley for a trader submitting a buy offer to behave as suggested by the Examiner, that would not teach having an offer matching system select a first price that is indicative of recent trading activity. Applicant has been unable to find in Sibley any disclosure that the central exchange host should calculate (i) any price or (ii) any price indicative of recent trading activity for any traded item.

At Page 11 lines 9-11 of Paper No. 13, near the end of the discussion of Claim 143 (204), the Examiner asserts (without citation) that “Sibley like any other trading, exchange system teaches that the offer will be executed if the first price (buy price) is greater than the maximum price that the customer is willing to trade his item for”. Applicant has been unable to find in Sibley any disclosure of executing a buy offer that specifies one price against a sell offer that specifies a different price. Sibley at column 5 lines 15-21, which discusses the mechanics of trading, states that “if one of the local users or members associated with the London Exchange 10 desires to trade with the member associated with the Kansas City Exchange 10, he may do so”, without ever suggesting the automatic matching or automatic execution by an offer matching system of offers that specify different prices.

Claim 143 (204) step (g) requires, in a method for executing offers in an offer matching system, “executing the buy offer against the sell offer, in whole or in part”. As discussed above in the context of Claim 52 (187) step (d), Sibley teaches away from having the central exchange host execute offers.

Claim 143 (204) step (g) requires, in a method for executing offers in an offer matching system, executing the buy offer against the sell offer, in whole or in part, “at a second price that is equal to:

the minimum price, if the first price is less than the minimum price,  
the first price, if the minimum price is less than the first price and the first price is less than the maximum price, or  
the maximum price, if the first price is greater than the maximum price.”

Applying step (g) to the Examples would result in the following second (i.e., execution) prices:

Example A: \$0.90 (the minimum price), because the first (market indicative) price would equal \$0.50 (the price of all prior trades) which is less than \$0.90 (the minimum price).

Example B: \$1.00 (the first, market indicative price), because the minimum price = \$0.90 is less than the first (market indicative) price = \$1.00 and the first (market indicative) price = \$1.00 is less than the maximum price = \$1.10. Note that in this case the buy and sell offers execute against each other at a price (\$1.00 per share) that does not appear in either offer -- i.e., a market related price determined by the offer matching system.

Example C: \$1.10 (the maximum price), because the first (market indicative) price = \$1.50 (the price of all prior trades) which is greater than the maximum price = \$1.10.

Applicant has been unable to find in Sibley any disclosure of having Sibley’s central exchange host select the price at which a buy order and a sell with different limit prices will

execute against each other using a formula that is conditioned upon the relationships among the buy order limit price, sell order limit price and a first price that is indicative of recent trading activity for a traded item.

In light of the foregoing, Applicant respectfully requests that Claim 143 (204), and Claims 144-147 (205-208) and 163-166 dependent therefrom, be allowed.

*Claims 144-147 (205-208)*

Each of Claims 144-147 (205-208) constrain step (f) of Claim 143 (204)'s method for executing offers in an offer matching system. As discussed above in the context of Claim 143 (204) step (f), Sibley does not teach having Sibley's central exchange host select a first price that is indicative of recent trading activity for the traded item, as required by Claim 143 (204) step (f). In Paper No. 13 at Page 11 lines 12-15, the Examiner asserts (without citation) that "It would have been obvious to a person of ordinary skill in the art at the time of Applicant's invention to have included the details of previously executed trade because such a modification would aid the buyer in determining a first price based on the prior history of the executed trades" [emphasis added]. Applicant objects to this assertion with no citation to relevant prior art. Furthermore, even if it would have been obvious for a buyer to act as the Examiner has asserted in deciding what offers to enter into an offer matching system, such a circumstance would not have made it obvious for an offer matching system to select the first price of Claim 143 (204) step (f) as required by Claims 144-147 (205-208). In light of the foregoing, Applicant respectfully requests that Claims 144-147 (205-208) be allowed.

*Claim 147 (208)*

Claim 147 (208) requires that the first price selected by an offer matching system in Claim 143 (204) step (f) be "dependent upon at least one data item that reflects trading in the traded item that did not occur through the offer matching system". Applicant has not found in Sibley any disclosure of having Sibley's central exchange host select a price indicative of recent trading activity for a traded item that is dependent upon a data item that reflects trading in the

traded item that did not occur through Sibley's central exchange host. In light of the foregoing, Applicant respectfully requests that Claim 147 (208) be allowed.

#### *Claims 163-166*

Each of Claims 163-166 has been amended to be dependent only upon Claims that are currently present in the Application. Consequently, Applicant respectfully requests that Claims 163-166 be allowed.

#### *Claims 169-171*

Claims 169-171 do not require a new search because Claim 169 is so similar to Claims 65 and 76 which have already been searched and allowed. Please note that Sibley teaches away from the requirement of Claim 169 step (b) clause (ii) that "the request is received in a manner that does not imply that the request is from a person entitled to receive nonpublic information concerning the first offer" because Sibley teaches at column 8 lines 47-52 that all communications should be encrypted.

Claim 169 does not constitute new matter for at least the following reasons (without admitting or implying in any way that there are not other good and sufficient reasons for concluding that such Claim does not constitute new matter): (a) the Application at page 4 lines 11-12 and page 23 line 15 discloses associating an offer with an identifier; (b) the Application discloses presenting a query or sending a request that (i) includes a first identifier (Application at page 4 lines 19-21 and page 24 lines 10-12) and (ii) not determining that the request is from a person entitled to receive nonpublic information (Application at page 4 lines 21-23 and page 24 lines 15-16); and (c) the Application at page 4 lines 21-24 and page 24 lines 17-20) discloses communicating a response that includes a data item that concerns the first offer.

Claim 170 does not constitute new matter for at least the following reasons (without admitting or implying in any way that there are not other good and sufficient reasons for concluding that such Claim does not constitute new matter): (a) the list of information that might be in a description of an offer that is set forth in the Application at page 12 line 10 to page 14 line 16, (b) Claim 126 in the Application at page 103 lines 14-20, (c) the list of information that

might be included in a transaction report that is set forth in the Application at page 20 lines 5-15, and (d) the list of requirements set forth in the Application at page 26 lines 1-13.

Claim 171 does not constitute new matter for at least the following reasons (without admitting or implying in any way that there are not other good and sufficient reasons for concluding that such Claim does not constitute new matter): (i) the conditional responses disclosed in the Application at page 22 line 21 to page 23 line 13; and (ii) the disclosure that a request can specify that a response should only be made after the occurrence of a condition in the Application at page 22 lines 24-25.

#### *Claim 172*

Claim 172 is a device claim that parallels Claim 169. Claim 172 does not require a new search because Claim 172 is so similar to Claims 65 and 76 which have already been searched and allowed. Claim 172 does not constitute new matter for at least the same reasons that Claim 169 does not constitute new matter.

#### *Claims 173-176*

Claim 173 is largely parallel to Claim 169, but from the perspective of a discloser, rather than an offer matching system.

Claims 173-176 do not require a new search because Claim 173 is so similar to Claims 65 and 76 which have already been searched and allowed. Please note that Sibley teaches away from the requirement of Claim 173 step (b) clause (ii) that "the request is made in a manner that does not imply that the request is from a person entitled to receive nonpublic information concerning the first offer" because Sibley teaches at column 8 lines 47-52 that all communications should be encrypted.

Claim 173 does not constitute new matter for at least the same reasons that Claim 169 does not constitute new matter.

Claim 174 does not constitute new matter for at least the following reasons (without admitting or implying in any way that there are not other good and sufficient reasons for concluding that such Claim does not constitute new matter): (i) the disclosure of similar

conditions in the Application at page 23 line 16 to page 24 line 9; and (ii) the disclosure concerning limits on public disclosure contained in Claim 77 in the Application at page 76 lines 6-11.

Claim 175 does not constitute new matter for at least the following reasons (without admitting or implying in any way that there are not other good and sufficient reasons for concluding that such Claim does not constitute new matter): the disclosure of the disclosee's lack of knowledge in Claim 76 step c in the Application at page 76 lines 1-2.

Claim 176 does not constitute new matter for at least the following reasons (without admitting or implying in any way that there are not other good and sufficient reasons for concluding that such Claim does not constitute new matter): the Application at page 27 lines 8-25.

#### *Claim 177*

Claim 177 does not require a new search because Claim 177 is so similar to Claim 52 (187) which has already been searched. Please note that for the reasons discussed above for the digital signature requirement in Claim 52 (187) step (g), Sibley does not disclose the digital signature requirement of Claim 177 step (c) clause (1)(B).

Claim 177 does not constitute new matter for at least the following reasons (without admitting or implying in any way that there are not other good and sufficient reasons for concluding that such Claim does not constitute new matter): (1) Claim 52 (187) in the Application at page 64 lines 1-20 and (2) the Application at page 4 lines 6-7.

#### *Claim 178*

Claim 178 is a device claim that parallels Claim 177. Claim 178 does not require a new search because Claim 178 is so similar to Claim 52 (187) which has already been searched. Claim 178 does not constitute new matter for at least the same reasons that Claim 177 does not constitute new matter.

#### *Claims 179-180*

Claims 179-180 do not require a new search because each of the steps and restrictions of Claim 179 is so similar to a step or restriction contained in Claims 88, 94, 101 and 109 (which Claims have already been searched and allowed). As discussed above in the context of Claim 124 (191) step (f), Sibley's teaching that all data be encrypted teaches away from the idea of the central host exchange's publishing any information.

Claim 179 does not constitute new matter for at least the following reasons (without admitting or implying in any way that there are not other good and sufficient reasons for concluding that such Claim does not constitute new matter): (a) the Application at page 4 lines 11-12 and page 23 line 15 discloses associating an offer with an identifier; and (b) Claim 88 step (h) in the Application at page 83 lines 14-16 which disclose publishing a data packet "in a manner that permits the first disclosee to receive it regardless of whether the first disclosee has a right to receive confidential information concerning the first offer."

Claim 180 does not constitute new matter for at least the reasons discussed above for Claim 170.

#### *Claim 181*

Claim 181 is a device claim that parallels Claim 179. Claim 181 does not require a new search because each of the elements of Claim 181 is so similar to an element contained in Claims 88, 94, 101 and 109 (which Claims have already been searched and allowed). As discussed above in the context of Claim 124 (191) step (f), Sibley's teaching that all data be encrypted teaches away from the idea of the central host exchange's publishing any information. Claim 181 does not constitute new matter for at least the reasons discussed above for Claim 179.

#### *Claims 182-183*

Claims 182-183 do not require a new search because each of the steps and restrictions of Claim 182 is so similar to a step or restriction contained in Claims 88, 94, 101 and 109 (which Claims have already been searched and allowed). Sibley's teaching at column 8 lines 47-52 that all data be encrypted teaches away from the requirement in Claim 182 step (b) clause (i) that the first disclosee receives a data packet "in a manner that would permit members of the public with



no right to receive nonpublic information about the first offer to receive and to use such data packet”.

Claim 182 does not constitute new matter for at least the following reasons (without admitting or implying in any way that there are not other good and sufficient reasons for concluding that such Claim does not constitute new matter): (a) the Application at page 4 lines 11-12 and page 23 line 15 discloses associating an offer with an identifier; (b) Claim 88 step (h) in the Application at page 83 lines 14-16 which disclose publishing a data packet “in a manner that permits the first disclosee to receive it regardless of whether the first disclosee has a right to receive confidential information concerning the first offer; and (c) Claim 88 step (i) in the Application at page 83 lines 19-20 discloses the first disclosee’s detecting that a data packet includes the first identifier.

Claim 183 does not constitute new matter for at least the following reasons (without admitting or implying in any way that there are not other good and sufficient reasons for concluding that such Claim does not constitute new matter): the Application at page 14 line 17 to page 16 line 2.

#### *Claim 184*

Claim 184 does not require a new search because it is so similar to Claim 142 (203) which has already been searched. As discussed above in the context of Claim 184, Sibley does not teach (a) storing in the central exchange host an association among a first local exchange and a first user terminal’s display monitor, (c) determining in the central exchange host that a first description of an offer is from a first local exchange, (d) receiving at the central exchange host from a user terminal’s display monitor a message that approves a first offer or (f) executing any offers in the central exchange host.

Claim 184 does not constitute new matter for at least the following reasons (without admitting or implying in any way that there are not other good and sufficient reasons for concluding that such Claim does not constitute new matter): Claim 142 (203) in the Application at page 111 line 22 to page 112 line 16.

*Claims 185-186*

Claims 185-186 do not require a new search because Claim 185 is so similar to Claim 143 (204) which has already been searched.

Claim 185 does not constitute new matter for at least the following reasons (without admitting or implying in any way that there are not other good and sufficient reasons for concluding that such Claim does not constitute new matter): Claim 143 (204) in the Application at page 112 line 17 to page 113 line 17.

Claim 186 does not constitute new matter for at least the following reasons (without admitting or implying in any way that there are not other good and sufficient reasons for concluding that such Claim does not constitute new matter): the Application at page 34 lines 16-26 and (b) Claims 143-147 (204-208) in the Application at page 112 line 17 to page 114 line 5.

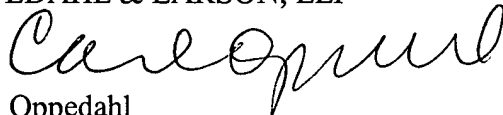
*Claims 187-208*

Claims 187-208 are identical to previously submitted claims: 52-55, 124-128, 130-136, and 142-147, which had been canceled in response to previous Office Actions.

**Conclusion**

For the reasons discussed above, Applicant respectfully requests that the following claims be allowed: 65-123, 129, 137-140, 163-166 and 168-208.

Respectfully submitted,  
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## MARKED UP VERSION OF AMENDED CLAIMS

163. (thrice amended) The method of claim [52], 65, 76, 82, 88, 94, 101, 109, 118, 129, 137, 138 [or 142], 169, 173, 177, 179, 182, 184, 185, 186, 187, 191, 197, 203 or 204 wherein the first offer is an offer to buy or to sell a quantity of a traded item selected from the group consisting of:

a financial product,

a swap,

a security,

a commodity,

a futures contract, and

a currency.

164. (four times amended) The method of claim 65, 76, 82, 88, 94, 101, 109, 118, 129, 137, 138, [or 153] 169, 173, 177, 179, 182, 184, 185, 186, 187, 191, 197, 203 or 204 wherein at least one step is performed using the Internet.

165. (four times amended) The method of claim 65, 76, 82, 88, 94, 101, 109, 118, 129, 137, 138, [or 153] 169, 173, 177, 179, 182, 184, 185, 186, 187, 191, 197, 203 or 204 wherein at least one step is completed in near real time.

166. (four times amended) The method of claim 65, 76, 82, 88, 94, 101, 109, 118, 129, 137, 138, [or 153] 169, 173, 177, 179, 182, 184, 185, 186, 187, 191, 197, 203 or 204 wherein at least one step is performed using a database replication feature of a database management system.

Assistant Commissioner for Patents  
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